

Listing of CLAIMS

1 1. (Cancelled)

1 2. (Cancelled)

1 3. (Cancelled)

1 4. (Previously Presented) A customizable application system comprising:

2 an internet application system configured to support an internet application, the internet
3 application associated with metadata configured for use in generating an
4 application user interface including a user interface element, the internet
5 application system including,

6 a) a user interface generator configured to generate the application user
7 interface using the metadata, and

8 b) a web application server configured to deliver the application user
9 interface to a client;

10 an application development system configured to generate the metadata, the metadata
11 being further configured to characterize a user customizable immediate access
12 keystroke combination associated with the user interface element;

13 a configuration system including a configuration engine and a configuration interface, the
14 configuration interface configured to modify configuration data further
15 characterizing the customizable immediate access keystroke combination; and

a data repository including a data record for storing the configuration data, the data record being accessible using the metadata.

1 5. (Previously Presented) An application development system for developing an internet
2 application having an application user interface, the application development system
3 comprising:
4 an integrated development environment configured for specifying a user interface
5 element in the application user interface, the user interface element having a user
6 customizable immediate access keystroke combination; and
7 an application designer configured to produce metadata to characterize the customizable
8 immediate access keystroke combination.

1 6. (Previously Presented) The application development system of claim 5, wherein the immediate
2 access keystroke combination is a hotkey keystroke combination.

1 7. (Previously Presented) The application development system of claim 5, wherein the immediate
2 access keystroke combination is responsive to the identity of a user.

1 8. (Previously Presented) A customizable application system for developing an application user
2 interface associated with an internet application comprising:
3 an integrated development environment configured for a developer to specify a user
4 interface element in the application user interface, the user interface element
5 having a user customizable immediate access keystroke combination;
6 an application designer configured to produce metadata characterizing the user
7 customizable immediate access keystroke combination; and

8 a data repository including a data record accessible using the metadata, the data record
9 being user modifiable and being configured to store data used to further
10 characterize the customizable immediate access keystroke combination.

1 9. (Previously Presented) The customizable application system of claim 8, wherein the user
2 customizable immediate access keystroke combination is a hotkey keystroke
3 combination.

1 10. (Previously Presented) The customizable application system of claim 8, wherein the user
2 customizable immediate access keystroke combination is configurable according to the
3 identity of a user.

1 11. (Previously Presented) The customizable application system of claim 8, wherein the data
2 record is user modifiable using a configuration system.

1 12. (Previously Presented) The customizable application system of claim 8, wherein the data
2 record is user modifiable using a personalization system.

1 13. (Previously Presented) The customizable application system of claim 12, wherein the
2 personalization system is integrated into the internet application.

1 14. (Previously Presented) An application execution system comprising:
2 an internet application system configured to support an internet application, the internet
3 application system including a query processor configured to query a data
4 repository, the data repository including a user modifiable data record configured

5 to store data characterizing a user customizable immediate access keystroke
6 combination;
7 an application user interface including a user interface element, the application user
8 interface configured as an interface between the internet application and a user,
9 the user interface element including the user customizable immediate access
10 keystroke combination, the user interface element configured for delivery to a
11 client over a computer network; and
12 metadata further characterizing the customizable immediate access keystroke
13 combination.

1 15. (Previously Presented) The application execution system of claim 14, wherein the client
2 supports the application user interface using standard web browser protocols.

1 16. (Previously Presented) The application execution system of claim 14, wherein the client
2 supports the application user interface using features of a web browser, the features not
3 requiring a browser add-on, plug-in, or extension.

1 17. (Previously Presented) The application execution system of claim 14, further including a
2 personalization system configured to modify the user modifiable data record.

1 18. (Previously Presented) The application execution system of claim 17, wherein the
2 personalization system is included in the internet application.

1 19. (Previously Presented) An internet application system comprising:

2 a user interface generator configured to generate a user interface including a user
3 interface element, the user interface being compatible with a standard web
4 browser and being generated in response to a request from a user, the user
5 interface element including a user customizable immediate access keystroke
6 combination;
7 a web application server configured to deliver the user interface to a client; and
8 an internet application accessible to the user through the generated user interface.

1 20. (Previously Presented) The internet application system of claim 19, wherein the user
2 interface generator is further configured to use metadata to characterize the user
3 customizable immediate access keystroke combination.

1 21. (Previously Presented) The internet application system of claim 19, wherein the user
2 customizable immediate access keystroke combination is a hotkey keystroke
3 combination.

1 22. (Previously Presented) The internet application system of claim 19, wherein the user
2 interface generator is further configured to use a user modifiable data record to
3 characterize the user customizable immediate access keystroke combination.

1 23. (Previously Presented) The internet application system of claim 19, further including means
2 for accessing a user-modifiable data record including data characterizing the user
3 customizable immediate access keystroke combination.

1 24. (Previously Presented) The internet application system of claim 19, wherein the internet
2 application includes a configuration system configured to modify data characterizing the
3 user customizable immediate access keystroke combination.

1 25. (Previously Presented) The internet application system of claim 19, wherein the client is a
2 wireless system.

1 26. (Previously Presented) The internet application system of claim 19, wherein the client is a
2 programmable device configured to support standard web browser protocols.

1 27. (Previously Presented) An internet application comprising:
2 an application user interface including a user interface element with a user customizable
3 immediate access keystroke combination, the application user interface
4 configured for delivery to a client and configured to operate as an interface
5 between a user and the internet application;
6 a user modifiable data record stored in a location physically remote from the client, the
7 user modifiable data record configurable for use by a user interface generator to
8 generate the application user interface, the user modifiable data record further
9 configurable to characterize the user customizable immediate access keystroke
10 combination; and
11 metadata configurable for use by the user interface generator to access the user
12 modifiable data record.

1 28. (Previously Presented) The internet application of claim 27, wherein the user customizable
2 immediate access keystroke combination is a hotkey keystroke combination.

1 29. (Previously Presented) The internet application of claim 28, wherein the user modifiable data
2 record is further configurable such that generation of the application user interface is
3 responsive to an identity of the client.

1 30. (Previously Presented) The internet application of claim 27, wherein the user modifiable data
2 record is configurable using a configuration interface.

1 31. (Previously Presented) The internet application of claim 27, wherein the user modifiable data
2 record is further configurable such that generation of the application user interface is
3 responsive to an identity of the user.

1 32. (Previously Presented) An application user interface between a user and an internet
2 application, the application user interface including a user interface element, the
3 application user interface being generated using metadata and being configured for
4 display using a standard web browser, the user interface element including a user
5 customizable immediate access keystroke combination characterized by a value stored in
6 a user modifiable data record, the metadata being configured to access the user
7 modifiable data record.

1 33. (Previously Presented) The application user interface of claim 32, wherein the metadata
2 being configured to access the user modifiable data record is responsive to an identity of
3 a client or an identity of the user.

1 34. (Previously Presented) The application user interface of claim 32, wherein the customizable
2 immediate access keystroke combination is a hotkey keystroke combination.

1 35. (Previously Presented) A method of developing a customizable user interface element for
2 inclusion in an application user interface, the method comprising the steps of:
3 developing a user interface element;
4 specifying a customizable property of the user interface element, the customizable
5 property including a user customizable immediate access keystroke combination;
6 determining a data record for holding a value configured to characterize the user
7 customizable immediate access keystroke combination, the data record being
8 stored in a data repository and being user modifiable, the data repository being
9 physically remote from a client used to display the application user interface, the
10 application user interface being for accessing an internet application;
11 generating metadata further characterizing the user customizable immediate access
12 keystroke combination, the metadata including a reference to the data record; and
13 storing the metadata in association with the user interface element.

1 36. (Previously Presented) The method of claim 35, wherein the user customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

1 37. (Previously Presented) The method of claim 36, wherein the step of specifying a
2 customizable property is performed using an integrated development environment.

1 38. (Previously Presented) The method of claim 36, wherein the internet application includes a
2 configuration system configured to modify the data record.

1 39. (Previously Presented) A method of generating a customizable application user interface, the
2 method comprising the steps of:

3 accessing a page definition, the page definition including metadata for characterizing a
4 user customizable immediate access keystroke combination;

5 accessing a data record using the metadata, the data record being stored in a data

6 repository and being user modifiable, the data repository being physically remote

7 from a client used to display the user customizable application user interface;

8 determining a value characterizing the user customizable immediate access keystroke

9 combination using information stored in the data record;

10 generating markup-language responsive to the determined value; and

11 including the generated markup-language in an application user interface.

1 40. (Previously Presented) The method of claim 39, wherein the customizable application user
2 interface is a user interface to an internet application.

1 41. (Previously Presented) The method of claim 40, further including a step of modifying the
2 data record using a configuration system.

1 42. (Previously Presented) The method of claim 40, wherein the step of accessing a data record
2 using the metadata is responsive to the identity of a user.

1 43. (Previously Presented) The method of claim 40, wherein the user customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

1 44. (Previously Presented) A method of developing an HTML based interface between a user
2 and an application, the method comprising the steps of:
3 selecting a user interface element, the user interface element including a user
4 customizable immediate access keystroke combination;
5 associating the user interface element with a data record, the data record being stored in a
6 data repository and being user modifiable;
7 including the user interface element in the interface;
8 generating metadata characterizing the user customizable immediate access keystroke
9 combination, the metadata being for accessing the data record; and
10 storing the metadata in association with the application.

1 45. (Previously Presented) The method of claim 44, wherein the application is an internet
2 application.

1 46. (Previously Presented) The method of claim 45, wherein the metadata is configured to access
2 the data record responsive to an identity of a user of the application.

1 47. (Previously Presented) The method of claim 45, wherein the customizable immediate access
2 keystroke combination is a hotkey keystroke combination.

1 48. (Previously Presented) A method of customizing an immediate access keystroke combination
2 in an HTML based application user interface for accessing an internet application, the
3 method comprising the steps of:
4 accessing a configuration system, the configuration system including a configuration
5 engine and a configuration interface;
6 selecting, using the configuration interface, the immediate access keystroke combination
7 of a user interface element in the HTML based application user interface, the
8 immediate access keystroke combination being user customizable; and
9 specifying configuration data using the configuration interface, the configuration data
10 characterizing the immediate access keystroke combination and the configuration
11 data being stored in a data repository physically remote from a client used to
12 display the HTML based application user interface.

1 49. (Previously Presented) The method of claim 48, wherein the immediate access keystroke
2 combination is a hotkey keystroke combination.

1 50. (Previously Presented) The method of claim 48, wherein configuration data is configured to
2 characterize the immediate access keystroke combination responsive to an identity of a
3 user of the internet application.

1 51. (Previously Presented) The method of claim 48, further including a step of modifying the
2 configuration data using a personalization system.

1 52. (Previously Presented) The method of claim 48, wherein the HTML based application user
2 interface is displayed at the client without requiring a browser add-on, plug-in, or
3 extension.

1 53. (Previously Presented) A method of customizing an immediate access keystroke combination
2 in an application user interface, the method comprising the steps of:
3 accessing a configuration system, the configuration system including a configuration
4 engine and a configuration interface;
5 selecting, using the configuration interface, an immediate access keystroke combination
6 of a user interface element in an application user interface, the immediate access
7 keystroke combination being user customizable;
8 specifying configuration data using the configuration interface, the configuration data
9 characterizing the immediate access keystroke combination; and
10 generating the application user interface using the specified configuration data, the
11 application user interface being associated with an internet application.

1 54. (Previously Presented) The method of claim 53, further including a step of displaying the
2 application user interface using standard web browser protocols.

1 55. (Previously Presented) The method of claim 53, wherein the immediate access keystroke
2 combination is a hotkey keystroke combination.

1 56. (Previously Presented) A method of executing an internet application comprising the steps
2 of:

3 receiving a request for an application user interface from a client, the application user
4 interface including a user interface element;
5 accessing a page definition, the page definition including metadata characterizing the
6 requested application user interface;
7 retrieving, using the metadata, a value characterizing a user customizable immediate
8 access keystroke combination of the user interface element, the value being stored
9 in a data repository physically remote from the client;
10 generating HTML responsive to the retrieved value;
11 including the generated HTML in the requested application user interface; and
12 delivering the requested user interface to the client, the requested application user
13 interface being an interface between a user and the internet application.

1 57. (Previously Presented) The method of claim 56, wherein the user customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

1 58. (Previously Presented) The method of claim 56, wherein the retrieved value is
2 personalization data.

1 59. (Previously Presented) The method of claim 56, further including a step of displaying the
2 application user interface on the client using standard web browser protocols.

1 60. (Previously Presented) The method of claim 56, further including the step of identifying the
2 requestor, wherein the step of retrieving a value is responsive to the identity of the
3 requester.

1 61. (Previously Presented) The method of claim 56, wherein the step of retrieving a value is
2 responsive to inclusion of the application user interface in an application component.

1 62. (Previously Presented) A method of generating an application user interface including a user
2 customizable immediate access keystroke combination, the method comprising the steps
3 of:
4 accessing a page definition, the page definition including metadata associated with the
5 user customizable immediate access keystroke combination;
6 reading data from a data record using the metadata, the data record being stored in a data
7 repository and being user modifiable, the data repository being physically remote
8 from a client used to display the application user interface;
9 determining a value characterizing the user customizable immediate access keystroke
10 combination using the data read from the data record;
11 generating HTML responsive to the determined value; and
12 including the generated HTML in the application user interface, the application user
13 interface being for accessing an internet application.

1 63. (Previously Presented) The method of claim 62, wherein the user customizable immediate
2 access keystroke combination is a hotkey keystroke combination.

1 64. (Previously Presented) The method of claim 62, wherein the data record includes
2 personalization data.

1 65. (Previously Presented) The method of claim 62, further comprising:

2 delivering the application user interface to the client; and
3 displaying the application user interface at the client using standard web browser
4 protocols.

1 66. (Previously Presented) The method of claim 62, further including identifying the client,
2 wherein the step of reading data is responsive to the identity of the client.

1 67. (Previously Presented) The method of claim 62, further including a step of identifying a user,
2 wherein the step of reading data is responsive to the identity of the user.

1 68. (Previously Presented) A method of generating a user customizable application user interface
2 configured for delivery from a server to a client, the method comprising the steps of:
3 receiving a request for the user customizable application user interface from a requestor,
4 the user customizable application user interface including a user interface
5 element;
6 identifying the requester of the user customizable application user interface;
7 accessing a page definition, the page definition including metadata characterizing the
8 requested user customizable application user interface;
9 retrieving a value characterizing a customizable immediate access keystroke combination
10 included in the user interface element, using the metadata and the identity of the
11 requester, the value being user modifiable and being stored in a data repository
12 physically remote from the client;
13 generating HTML responsive to the value;
14 including the generated HTML in the requested user customizable application user
15 interface; and

16 delivering the requested user customizable application user interface to the client.

1 69. (Previously Presented) The method of claim 68, wherein the customizable immediate access
2 keystroke combination is a customizable hotkey keystroke combination.

1 70. (Previously Presented) The method of claim 68, further including displaying the user
2 customizable application user interface using standard web browser protocols.

1 71. (Previously Presented) A computer readable medium including an internet application, the
2 internet application comprising:
3 metadata defining an application user interface, the application user interface including a
4 user interface element with a user customizable immediate access keystroke
5 combination, the application user interface configured for delivery to a client and
6 configured to operate as an interface between a user and the internet application;
7 a user interface generator configured to generate the application user interface using a
8 user modifiable data record stored in a location physically remote from the client,
9 the user modifiable data record configurable to characterize the user customizable
10 immediate access keystroke combination; and
11 a configuration system configured for a user to modify the user modifiable data record.

1 72. (Previously Presented) A computer readable medium including an internet application, the
2 internet application comprising:
3 an application designer configured to develop an application user interface, the
4 application user interface including a user interface element with a user
5 customizable immediate access keystroke combination, the application user

6 interface configured for delivery to a client and configured to operate as an
7 interface between a user and the internet application;
8 a user interface generator configured to generate the application user interface using a
9 user modifiable data record stored in a location physically remote from the client,
10 the user modifiable data record configurable to characterize the user customizable
11 immediate access keystroke combination; and
12 a configuration system configured for a user to modify the user modifiable data record.

1 73. (Previously Presented) An application execution system comprising:

2 means for supporting an internet application;
3 means for generating an application user interface using a user modifiable data record
4 configured to store data characterizing a user customizable immediate access
5 keystroke combination; and
6 means for providing the application user interface to a user, the application user interface
7 including a user interface element, the application user interface configured as an
8 interface between the internet application and the user, the user interface element
9 including the user customizable immediate access keystroke combination, the user
10 interface element configured for delivery to a client over a computer network.